Raymond
Hobson
Kingman
Ind.

WHITE'S ARITHMETICS.

First Book of Arithmetic,	$0 30
New Elementary Arithmetic, (Short course.)	25
New Elementary Arithmetic,	50
New Complete Arithmetic,	65
Oral Lessons in Number,	60
Primary Arithmetic (old),	22
Intermediate Arithmetic (old),	35
Complete Arithmetic (old),	65

WHITE'S SCHOOL RECORDS.

New School Register,	60
New Common School Register and Term Record,	60
New Graded School Register,	60
Teachers' Class Record,	60
Pupil's Daily Record, per dozen,	96
Monthly School Record,	40
White's Elements of Pedagogy,	I 00
White's School Management,	I 00

Sent, postpaid, on receipt of price.

IT is now thir
Complete Arithm
the present with
can schools. In
its revision, and
been comparat
books have mo
use—the best
But the dem
first book, has
plete Arithm
view of bette
new series,
dition of sc
neither auth
quired to m
use in the
The mos
increase in
done witho
drill prob
marked ir
cluding st
of review
duction i
few of th
omitted.

20. Copy and add the upper half of 16 and the upper half of 17 together as one example.

21. Copy and add the lower half of 16 and the lower half of 17 together as one example.

22. Copy and add the upper half of 18 and the upper half of 19 together as one example.

23. Copy and add the lower half of 18 and the lower half of 19 together as one example.

MULTIPLICATION AND DIVISION.

ORAL PROBLEMS.

1. A mechanic earns $2.50 a day: how much will he earn in 6 days? 10 days? 20 days?

2. What will 8 barrels of flour cost, at $7.25 a barrel? At $6.50? At $6.25? At $7.50?

3. What will 10 yards of carpeting cost, at $1.75 a yard? At $1.25? At $1.50? At 75 cts.?

4. A drover paid $38.70 for 9 sheep: what did they cost apiece?

5. A man paid $42 for 8 tons of coal: what did it cost per ton?

6. If a man earn $39 in 6 days, how much will he earn in 5 days? In 10 days? 20 days? 8 days?

7. At 25 cents a dozen, how many dozens of eggs can be bought for $4.50? For $5? $6? $8?

WRITTEN PROBLEMS.

8. A farmer sold 45 hogs, at $22.45 apiece: how much did he receive for them?

9. A miller sold 237 pounds of flour, at 7.62\frac{1}{2}$ a barrel: how much did he receive?

10. A man sold a farm of 260 acres, at 33\frac{1}{3}$ per acre: what was the amount received?

11. A farm containing 125 acres was sold for $5093.75 : what was the price per acre?

12. How many chairs, at $1.25 apiece, can be bought for $80? For $75? For $100?

13. At 12.37\frac{1}{2}$ a ton, how many tons of hay can be bought for $4653? For $1163.25?

14. A farmer sold 3 hogs, weighing respectively 278, 309, and 327 pounds, at $.07$\frac{1}{2}$ a pound: how much did he receive?

15. A farmer sold in one year 536 pounds of butter, at 30 cts. a pound; 1200 pounds of cheese, at 16$\frac{2}{3}$ cts.; and 19 tons of hay, at $8.75 a ton: how much did he receive?

16. A grocer bought 540 pounds of coffee for $81, and 420 pounds of tea for $525; he sold the coffee at 18 cts. a pound, and the tea at $1.60 a pound: how much did he gain?

ART. 131. **1.** To multiply or divide sums of money by an abstract number:

Rule.—*Multiply or divide as in simple numbers, separate dollars and cents in the result by a decimal point, and prefix the dollar sign.*

2. To divide one sum of money by another:

Rule.—*Reduce both numbers to the same denomination, and divide as in simple numbers.*

ALIQUOT PARTS.

ART. 132. When the price of an article is an aliquot part of a dollar, the cost of any number of such articles may be found more readily than by multiplying.

The aliquot parts of a dollar commonly used in business, are:

50 cts. = $\frac{1}{2}$ of $1.00	12$\frac{1}{2}$ cts. = $\frac{1}{8}$ of $1.00
25 " = $\frac{1}{4}$ of 1.00	6$\frac{1}{4}$ " = $\frac{1}{16}$ of 1.00
20 " = $\frac{1}{5}$ of 1.00	33$\frac{1}{3}$ " = $\frac{1}{3}$ of 1.00
10 " = $\frac{1}{10}$ of 1.00	16$\frac{2}{3}$ " = $\frac{1}{6}$ of 1.00

The following aliquot parts of aliquot parts of a dollar are also used:

25 cts. = $\frac{1}{2}$ of 50 cts.	16$\frac{2}{3}$ cts. = $\frac{1}{2}$ of 33$\frac{1}{3}$ cts.
12$\frac{1}{2}$ " = $\frac{1}{4}$ of 50 "	12$\frac{1}{2}$ " = $\frac{1}{2}$ of 25 "
6$\frac{1}{4}$ " = $\frac{1}{8}$ of 50 "	6$\frac{1}{4}$ " = $\frac{1}{4}$ of 25 "

ORAL PROBLEMS.

17. What will 56 pounds of grapes cost, at 12$\frac{1}{2}$ cts. a pound?

SOLUTION.—At $1 a pound, 56 pounds will cost $56, and at 12$\frac{1}{2}$ cts., which is $\frac{1}{8}$ of $1, 56 pounds will cost $\frac{1}{8}$ of $56, which is $7.

18. What will 120 spellers cost, at 25 cts. apiece? At 33$\frac{1}{3}$ cts.? At 16$\frac{2}{3}$ cts.? At 20 cts.?

19. What is the cost of 96 dozens of eggs, at 16$\frac{2}{3}$ cts. a dozen? At 20 cts.? At 25 cts.? At 33$\frac{1}{3}$ cts.?

20. What will 240 pounds of sugar cost, at 12$\frac{1}{2}$ cts. a pound? At 16$\frac{2}{3}$ cts.? At 20 cts.?

21. At 16$\frac{2}{3}$ cts. a dozen, how many dozens of eggs can be bought for $15?

SOLUTION.—At 16$\frac{2}{3}$ cents a dozen, $1 will buy 6 dozens of eggs, and $15 will buy 15 times 6 dozens, or 90 dozens.

22. At 12$\frac{1}{2}$ cts. a pound, how many pounds of lard can be bought for $12? For $25? For $40?

23. How many pounds of butter, at 33$\frac{1}{3}$ cts. a pound, can be bought for $15? For $33? For $40?

24. At 6$\frac{1}{4}$ cts. a quart, how many quarts of currants can be bought with 30 quarts of cherries, at 10 cts. a quart?

WRITTEN PROBLEMS.

25. What will 348 yards of carpeting cost, at $1.62½ cts. a yard?

PROCESS.

$$\$1.62\tfrac{1}{2} = \$1 + 50 \text{ cts.} + 12\tfrac{1}{2} \text{ cts.}$$

$$
\begin{array}{rl}
\$348 & = \text{cost at } \$1 \text{ a yard.} \\
\tfrac{1}{2} \ | \ 174 & = \text{``  `` } 50 \text{ cts. a yard.} \\
\tfrac{1}{4} \ | \ 43.50 & = \text{``  `` } 12\tfrac{1}{2} \text{ `` `` } \\
\hline
\$565.50 & = \text{``  `` } \$1.62\tfrac{1}{2} \text{ `` }
\end{array}
$$

26. What will 1600 bushels of oats cost, at 37½ cts. a bushel? At 45 cts. a bushel? At 62½ cts. ?

27. What will 2464 bushels of wheat cost, at $1.25 a bushel? At $1.37½? At $1.50? At $1.62½?

28. What will 1250 yards of carpeting cost, at $1.37½ a yard? At $1.50? At $1.25? At $1.75? At $1.87½.

29. What will 640 bottles of ink cost, at 87½ cents a bottle? At 62½ cts. ? At 50 cts. ? At 75 cts. ?

30. At 25 cts. a dozen, how many dozens of eggs can be bought for $12? For $25? For $42? For $105?

31. At 33⅓ cts. a yard, how many yards of cloth can be bought for $50? For $75? For $90? For $120?

32. What will 5 lb. 10 oz. of butter cost, at 35 cts. a pound?

PROCESS.

$$
\begin{array}{rl}
\$\ .35 & = \text{cost of } 1 \text{ lb.} \\
\hline
\$1.75 & = \text{``  `` } 5 \text{ lb.} \\
.175 & = \text{``  `` } 8 \text{ oz. } (\tfrac{1}{2} \text{ lb.}) \\
.044 & = \text{``  `` } 2 \text{ `` } (\tfrac{1}{8} \text{ lb.}) \\
\hline
\$1.969 & = \text{``  `` } 5 \text{ lb. } 10 \text{ oz.}
\end{array}
$$

33. What will 9 lb. 13 oz. of cheese cost, at 15 cts. a pound? At 16 cts. ? At 18 cts. ? At 20 cts. ?

34. What will 16 gal. 3 qt. of sirup cost, at $.90 a gallon? At $1.10? At $1.25? At $1.62½? .

35. What will 7 bu. 3 pk. 4 qt. of cherries cost, at $4.25 a bushel? At $3.50? At $4? At $4.50?

ART. 133. 1. To find the cost of a number of articles when the price is an aliquot part of a dollar:

Rule.—*Find the cost at $1, and take such part of the result as the price is of $1.*

2. To find the number of articles which can be purchased for a given sum of money when the price is an aliquot part of a dollar:

Rule.—*Find the number of articles that can be purchased for $1, and multiply the result by the given sum of money, considered as an abstract number.*

BILLS.

ART. 134. Each of the following bills should be neatly made out on paper, in proper form, and receipted:

1.

CINCINNATI, O., Jan. 1, 1883.

THOMAS KNIGHT,

Bought of BAKER, SMITH & Co.

1882.							$	
Nov.	18,	48 lb.	Castile Soap,	@ 16⅔c.	. . .		$8	00
"	"	25 "	Starch,	@ 6¼	. . .		1	56
"	30,	65 "	Sugar,	@ 15	. . . .		9	75
"	"	33 gal.	Vinegar,	@ 20	. . . .		6	60
Dec.	12,	16 lb.	Rio Coffee,	@ 23	. . . .		3	68
"	"	5 "	Star Candles,	@ 20	. . . .		1	00
"	"	56 "	Butter,	@ 33⅓	. . .		18	67
"	15,	10 "	Cheese,	@ 15	. . . .		1	50
							$	

Received Payment,

BAKER, SMITH & Co.

Per COONS.

CLEVELAND, O., Nov. 24, 1882.

Dr. WILLIAM JONES,   *To* CHARLES C. WILHELM, *Dr.*

				$
To 24 Days' Work,	@	$2.75	. . . . . .	
" 21 lb. Nails,	@	6¼	. . . . .	
" 540 ft. Pine Lumber,	@	2.50 per C.	. . . .	
" 4 M. Shingles,	@	4.33⅓	. . . .	
				$

Cr.

Oct. 16, by cash,	. . . .	$25
" 23, " "	. . . .	44
Medical Services to date,	. . . .	15
		$
		$

Received payment, by due-bill,

CHARLES C. WILHELM.

What is the amount of the due-bill?

3 Mrs. C. B. Jones bought of Cole, Steele & Co., of Indianapolis, as follows: Nov. 12th, 1882, 23 yds. muslin, @ 16⅔ cts..; 45 yds. sheeting, @ 12½ cts.; Dec. 7th, 12 yds. silk, @ $1.62½; 8 handkerchiefs, @ 45 cts.; 2 pairs kid gloves, @ $1.37½; 6 neckties, @ 75 cts. Make out and receipt the above bill.

4. Daniel Hough bought of George F. Wheeler, Columbus, Ohio, Jan. 15th, 1883, 45 lb. of sugar at 11 cts., 48 lb. of flour at 4¼ cts., and 36 lb. of Rio coffee at 27 cts.; Feb. 15th, 17 lb. of butter at 28 cts., 15 lb. of lard at 7½ cts., 36 lb. of ham at 14 cts., 8 lb. of cheese at 12½ cts., and 25 lb. of tea at 95 cts. Make out and receipt this bill as clerk of Mr. Wheeler.

5. Luther Day bought of William Taylor, Lafayette, Ind., Sept. 10th, 1882, 7 tons of hard coal at $6.45 per ton, and 6 tons of soft coal at $3.75; Oct. 5th, 5 cords of wood at $5.25; Oct. 7th, 13 tons hard coal at $6.95 per ton, 20 tons of soft coal at $4.10 per ton, and 16

bushels of charcoal at 24 cts. Mr. Day paid Oct. 9th, $50, Dec. 1st, $75, Dec. 10th, $50, Dec. 15th, $25, and the balance by due-bill Dec. 31st. Make out and receipt this bill, using Bill 2 as a model.

NOTE.—The pupils should be required to make out original bills until they are able to complete any business transaction involving a receipted bill.

DEFINITIONS.

ART. 135   An **Account** is a record of business transactions between two parties, with statements of debts and credits.

The party owing the debts specified, is called the *Debtor*, and the party to whom they are due, is called the *Creditor*.

ART. 136.   A **Bill** is a written statement of an account. It is drawn by the creditor against the debtor, and gives the time and place of the transaction, and the names of the parties.

When the debtor has made payments on the account, or has charges against the creditor, such payments or charges are called *Credits*. They are entered as in Bill 2, p. 110.

ART. 137.   A bill is receipted by writing the words *"Received Payment"* at the bottom, and affixing the creditor's name. This may be done by the creditor, or by a clerk, agent, or any other authorized person.

If the debtor is not able to pay a bill when presented, it may be accepted by writing the word *"Accepted"* across its face, with date and signature. When a bill is paid by a promissory note or due-bill, the fact may be added to the words *"Received Payment,"* as in Bill 2.

ART. 138.   A **Bill of Goods** is a written statement of goods sold, with the amount and price of each article, and the entire cost. It is also called an *Invoice*.